

COLORECTAL CANCER

BACKGROUND

Facts about colorectal cancer

- Colorectal cancer is the 3rd leading cause of cancer death in Massachusetts.
- Colorectal cancer affects both men and women.
- Colorectal cancer occurs most often in people over the age of 50.
- A healthy diet and a physically active lifestyle help reduce the risk of developing colorectal cancer.
- Most colorectal cancers are preventable with routine screening tests and, when detected early, are almost always treatable.
- Screening tests for colorectal cancer save lives.

What is colorectal cancer?

- Colorectal cancer is a cancer that affects the colon and/or rectum, which are both part of the large intestine. This is where food is processed and waste is stored before being removed from the body.
- Colorectal cancer usually starts as a non-cancerous growth called a polyp that forms on the lining of the colon or rectum. Even though polyps are not cancerous, they can eventually develop into cancer if they are not removed.
- The most common type of colorectal cancer is called adenocarcinoma.

What are the signs and symptoms of colorectal cancer?

Symptoms for colorectal cancer include:

- Blood in the stool (sometimes invisible to the naked eye) or rectal bleeding.
- Changes in bowel habits – diarrhea, constipation or narrowing of the stools.
- Abdominal pain or bloating that doesn't go away.
- Losing weight without trying.
- Unexplained anemia.
- Weakness and fatigue.
- Have a constant urge to have a bowel movement even after one has occurred.

However, in the early stages of the disease, when it is most treatable, colorectal cancer often has no symptoms at all.

Talk with your health care professional if you have any of these symptoms.

What are the risk factors for colorectal cancer?

Factors that increase the risk of developing colorectal cancer include:

- Age. Colorectal cancer can occur at any age, but if you are 50 years or older, your chances of getting colorectal cancer increase.
- Personal history of colorectal cancer or adenomatous polyps especially if the first diagnosis is made when you were age 60 or younger.
- Family history of colorectal cancer or polyps, including the various polyposis syndromes such as familial adenomatous polyposis, Gardner's syndrome or Peutz-Jeghers Syndrome. If you have a parent, child, or sibling with colorectal cancer or a history of polyps, your risk for colorectal cancer increases.
- Personal history of inflammatory bowel disease, such as ulcerative colitis or Crohn's Disease.
- Personal history of ovarian, breast or endometrial cancer.
- Diet high in red meat.
- Diet low in fruits, vegetables, folate, and calcium.
- Physical inactivity.
- Obesity.
- Alcohol.
- Smoking.

PREVENTION AND SCREENING

How can I reduce my risk of developing colorectal cancer?

- Start getting screening tests for colorectal cancer at age 50 (or earlier if you have a family history of colorectal cancer or if you have inflammatory bowel disease).
- Do at least 30 minutes of moderate physical activity every day.
- Maintain a healthy weight.
- Consume no more than 2 – 3 servings of red meat a week.
- Take a multivitamin that contains essential folic acid.
- Have no more than 1 alcoholic drink a day.
- Eat 5 or more servings of fruits and vegetables a day.
- Don't smoke.

Screening for colorectal cancer

The screening tests for colorectal cancer include the following:

Fecal Occult Blood Test (FOBT)

Some polyps and cancers bleed but in such small amounts that you can't see it. This test checks for hidden blood in samples of your stool.

You can do this test at home using a kit from your provider. With the kit, you'll take samples of your stool and mail them to your provider or a medical laboratory for testing. The instructions with the kit will explain that you need to avoid certain foods for 2 days before you take the samples. An FOBT done during a digital rectal exam (DRE) in a doctor's office is not sufficient for screening.

Fecal Immunochemical Test (FIT)

This is a newer kind of stool blood test kit, which detects the hidden blood in the stool- the “globin” part of the hemoglobin molecule. This is a more specific test and doesn’t require food restrictions when testing for the “globin”.

What If Blood Is Found?

Most patients with hidden blood in the stool don’t have cancer. The test is good at finding blood, but it can’t tell where it came from. You’ll have to have a colonoscopy to see if you have polyps or cancer.

Sigmoidoscopy (sig-moyd-os-ko-pee)

Providers often recommend that you have both fecal occult blood testing or fecal immunochemical testing and sigmoidoscopy. Sigmoidoscopy looks directly inside the colon for polyps and cancer. A thin, flexible tube is inserted into your rectum and moved into your colon. A tiny camera on the end of the tube lets your provider see the lower half of your colon. You may feel mild cramping during the test, and there is a very small chance (1 in 10,000) of a serious complication.

What If a Growth Is Found?

Many people have polyps, but most aren’t cancerous. If you have a polyp or growth that looks cancerous, a sample (biopsy) may be taken during the test or you may need a colonoscopy.

Barium Enema (bare-ee-um en-e-ma)

This test uses x-rays to look for polyps or cancers in your colon. A small tube is inserted in your rectum and fluid called barium sulfate is passed into your colon. The person is turned to cover the whole colon with the barium sulfate. Air is then pumped in through the same tube to allow for better x-ray imaging of the colon. The barium highlights any growths that appear on the x-rays. You may feel mild cramping during the test, and there is a very small chance (less than 1 in 10,000) of a serious complication.

What If a Growth Is Found?

Many people have polyps, but most aren’t cancerous. If a polyp or growth is found, you will need a colonoscopy to remove a small sample (biopsy) of the polyp or growth.

Colonoscopy (kole-en-oss-ko-pee)

This test is similar to sigmoidoscopy except that it examines your entire colon, and polyps can be removed during the test. You will receive medication to help you relax, which means you’ll need someone to take you home after the test. There is a small chance (10 in 10,000) of a serious complication.

What If a Growth Is Found?

If you have a polyp, it will probably be removed during colonoscopy. If you have a growth that looks cancerous, a biopsy might be done.

Test Preparation

Before you have a flexible sigmoidoscopy, barium enema, or colonoscopy, you must clear out your colon. There are many ways to do this, but most involve drinking only clear liquids and using a laxative or enema before the test.

When To Get Screened

Talk with your health care provider about which colorectal cancer screening test might be right for you. Start getting screened at age 50, using one of the following:

- Home fecal occult blood test or fecal immunochemical test every year.
- Flexible sigmoidoscopy every 5 years.
- Home fecal occult blood test every year and flexible sigmoidoscopy every 5 years.
- Double-contrast barium enema every 5 years.
- Colonoscopy every 10 years.

People who are at increased risk for developing colorectal cancer, such as those with a family history of colorectal cancer or polyps and those with inflammatory bowel disease, may need to get tested at a younger age and perhaps more frequently.

DIAGNOSIS AND TREATMENT

This site provides general information that may apply to your specific situation. You may visit the National Cancer Institute's web site www.cancer.gov for the most current cancer information and clinical trials. Once there, you will be able to select from a full range of cancer topics. If you want to speak with a cancer information expert confidentially, you may call 1-800-4CANCER (1-800-422-6237) between 9:00 AM - 4:30 PM.

It is always best to discuss your personal risk for cancer as well as your screening, diagnosis and treatment needs with your health care provider before you commit to a course of action.

How is colorectal cancer diagnosed?

If the health care professional suspected colorectal cancer, there will be a medical history evaluation and a physical exam done. The tests found in screening will be used to help detect the colorectal cancer.

Colorectal cancer is often first suspected when a person experiences symptoms or when an abnormal result is found on a screening test. In either situation, the person will need to be further evaluated by a colonoscopy. A biopsy (removing a piece of abnormal tissue and examining it under a microscope) is required to confirm the diagnosis of colorectal cancer.

How is colorectal cancer treated?

Surgery is the primary treatment for colorectal cancer. Chemotherapy and radiation may also be used depending on the stage of the disease. Patients with rectal cancer may be treated with radiation and/or chemotherapy before having surgery. A colostomy (wearing a bag outside the body to collect stools) is usually not a permanent outcome of the surgery, but this depends on the location and extent of the cancer. There are newer therapies that use monoclonal antibodies that specifically target the cancer cells.

STATISTICS

How many people are diagnosed with colorectal cancer? How many people die from it?

- The American Cancer Society estimates that in 2007 there will be 153,760 new cases of colorectal cancer in the United States (79,130 in men and 74,630 in women). The estimated new cases of colorectal cancer for 2007 in Massachusetts are 3,850.
- The American Cancer Society also estimates in 2007 there will be 52,180 deaths from colorectal cancer in the United States (26,000 in men and 26,180 in women). The estimated deaths from colorectal cancer for 2007 in Massachusetts are 1,180.
- The national five-year relative survival rates for 1996-2003 show that 64.8% of males survive five years after diagnosis and 64.9% of females survive five years after diagnosis of colorectal cancer.
- In Massachusetts, between 2000 and 2004, the age-adjusted incidence rate of colorectal cancer in men was 69.0 cases per 100,000 males and in women was 49.4 cases per 100,000 females. Men are 1.4 times more likely to develop colorectal cancer than women.
- The age-adjusted mortality rate of colorectal cancer was higher in Massachusetts men (24.6 deaths per 100,000 males) than in Massachusetts women (17.0 deaths per 100,000 females) between 2000 and 2004. Men are 1.4 times more likely to die from colorectal cancer than women.
- The age-adjusted incidence rate of colorectal cancer for males is 9.7% higher in Massachusetts than nationally and for females is 7.8 % higher in Massachusetts than nationally (based on data from the North American Association of Central Cancer Registries, 2000-2004).
- The age-adjusted mortality rate of colorectal cancer for males is 4.7% higher in Massachusetts than nationally and for females is 8.5% higher in Massachusetts than nationally (based on data from the North American Association of Central Cancer Registries, 2000-2004).

For additional statistics on colorectal cancer in Massachusetts, see Massachusetts Community Health Information Profile (MassCHIP) Instant Topics - Cancer: Colon/Rectum [<http://masschip.state.ma.us/InstantTopics/affiliate.htm>]. Please click on an affiliation then find colon/rectum cancer for the instant topics.

DPH PROGRAMS AND INFORMATION

DPH colorectal cancer programs

The Massachusetts Department of Public Health is a member of the Massachusetts Colorectal Cancer Working Group, a collaborative consisting of more than 30 organizations across the Commonwealth. The Working Group has engaged in a variety of projects and activities including knowledge, attitudes and practice surveys of primary care professionals in Massachusetts, and production of professional education materials and public education materials. The public education brochures are available in 8 languages including English. The Working Group has also conducted media campaigns utilizing trains, buses, and radio spots to promote the importance of screening and has implemented targeted community awareness campaigns in the City of Springfield and in Barnstable, Berkshire and Worcester Counties.

Publications and Materials

Reports

The following reports can be accessed from the Massachusetts Cancer Registry website at <http://www.mass.gov/dph/bhsre/mcr/canreg.htm>

- Statewide Reports: *Cancer Incidence and Mortality in Massachusetts – Statewide Report 2000-2004*
- City and Town Series: *Cancer Incidence in Massachusetts – City and Town Supplement 2000-2004*
- Special Reports: *Colorectal Cancer in Massachusetts 1982-2001: Data Report*

Pamphlets, Brochures and Videos

- [Colorectal Cancer: A Risk Management Guide for Health Care Professionals](#) [insert pdf file]

The following materials, developed by the Massachusetts Colorectal Cancer Working Group, can be requested by contacting the Massachusetts Health Promotion Clearinghouse at 1-800-952-6637 or by visiting their website at www.maclearinghouse.com.

- Brochure - You Can Prevent Colorectal Cancer (*for general audience; available in English, Spanish, Portuguese, Vietnamese, Khmer, Russian, Chinese, and French.*)
- Brochure - Take Control: Get Tested for Colorectal Cancer (*for adults age 50 and older; available in English, Spanish, Portuguese, Vietnamese, Chinese, Russian, and French.*)

For additional information or to order the following materials please contact Nanyamka Hales, MPH, Colorectal Cancer Coordinator, at 617-624-5462 or via email at Nanyamka.Hales@state.ma.us.

- Slide presentation- Colorectal Cancer Screening (*for health care professionals.*)
- Slide presentation- Everything You Ever Wanted to Know About Colorectal Cancer Prevention and Screening but Were Afraid to Ask (*for general audience.*)

RELATED LINKS

Background/General Links

American Cancer Society (ACS)

- Cancer Reference Information: All About Colon and Rectum Cancer
http://www.cancer.org/docroot/cric/cric_2x.asp?sitearea=cric&dt=10

American Gastroenterological Association

- Colorectal Cancer Detection and Prevention
<http://www.gastro.org/clinicalRes/brochures/crc.html>

Harvard Center for Cancer Prevention

- Your Disease Risk: Colon Cancer

<http://www.yourdiseaserisk.harvard.edu/hccpquiz.pl?func=start&quiz=colon>

National Cancer Institute (NCI)

- Colon and Rectal Cancer
<http://www.cancer.gov/cancertopics/types/colon-and-rectal>
- What You Need To Know About Cancer of the Colon and Rectum
http://www.cancer.gov/cancer_information/doc_wyntk.aspx?viewid=b5ecd606-69f5-4e0b-87a7-20c8b9d8172d

Prevention and Screening Links

American Gastroenterological Association

- Colorectal Cancer Screening
http://www.gastro.org/clinicalRes/brochures/cc_screening.html

Centers for Disease Control and Prevention (CDC)

- Colorectal Cancer Prevention and Control Initiatives
<http://www.cdc.gov/cancer/colorctl/index.htm>

National Cancer Institute (NCI)

- Colorectal Cancer (PDQ) - Prevention
http://www.cancer.gov/cancer_information/doc_pdq.aspx?version=patient&viewid=be505c0c-0f17-460f-ae0a-e567ca9bc6b2
- Colorectal Cancer (PDQ) - Screening
http://www.cancer.gov/cancer_information/doc_pdq.aspx?version=patient&viewid=d5d1df96-c862-43af-86bc-f80466b57966

Diagnosis and Treatment Links

American Cancer Society (ACS)

- NexProfiler Treatment Option Tool for Colorectal Cancer
<https://www.cancer.nexcura.com/Secure/InterfaceSecure.asp?CB=267>

National Cancer Institute (NCI)

- Clinical Trials
http://www.cancer.gov/clinical_trials/
- Colon Cancer (PDQ) - Treatment
http://www.cancer.gov/cancer_information/doc_pdq.aspx?version=patient&viewid=2cfe2c5f-9e61-4026-a62e-939e818fd165
- Rectal Cancer (PDQ) – Treatment
http://www.cancer.gov/cancer_information/doc_pdq.aspx?version=patient&viewid=5e7b4202-e2a2-4565-8510-39becf735fbf

Statistics Links

American Cancer Society (ACS)

- Statistics
http://www.cancer.org/docroot/stt/stt_0.asp

Centers for Disease Control and Prevention (CDC) and National Program of Cancer Registries (NPCR)

- *United States Cancer Statistics Incidence and Mortality*
<http://www.cdc.gov/cancer/npcr/uscs/index.htm>

National Cancer Institute (NCI)

- *Surveillance, Epidemiology and End Results (SEER) Cancer Statistics Review, 1975-2003*
http://seer.cancer.gov/csr/1975_2003/

North American Association of Central Cancer Registries (NAACCR)

- *Cancer in North America* Publications
http://www.naaccr.org/index.asp?Col_SectionKey=11&Col_ContentID=50